

PTO/SB/08a (07-05)

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Substitute for form	1449Ä/PTO			Complete if Known	
INICODIA	ATION D		UDC	Application Number	10/560,800
		DISCLOS		Filing Date	May 12, 2006
STATEM	ENT BY	APPLICA	ANT	First Named Inventor	Jiming Li
(Use a	(Use as many sheets as necessary)			Art Unit	3676
			Examiner Name	Not Yet Assigned	
Sheet	<u>l</u>	of	3	Attorney Docket Number	0815-053671

			U.S. PATENT I	DOCUMENTS	
Examiner Initials*	Cite No.	Document Number  Number - Kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
VP		US- 881,474	03-10-1908	Jude	Figures Appear
VP		US- 2,963,307	12-06-1960	Robo	
VP		US- 3,575,523	04-20-1971	Gross, Jr.	
VP		US- 3,746,462	07-17-1973	Fukuda	
VP		US- 4,046,388	09-06-1977	Меует	
VP		US- 4,057,362	04-08-1977	Schwaebel .	
VP		US- 4,114,059	09-12-1978	Albaric et al.	
VP		US- 4,257,617	03-24-1981	Hill	
VP		US- 4,273,510	06-16-1981	Ambrosch et al.	
VP		US- 4,370,094	01-25-1983	Ambrosch et al.	,
VP		US- 4,420,161	12-13-1983	Miller	
VP		US- 4,436,311	03-13-1984	Brandon	
VP		US- 4,714,406	12-22-1987	Hough	•
VP		US- 4,767,266	08-30-1988	Holz et al.	
VP		US- 4,776,754	10-11-1988	Nishioka '	
VP		US- 4,979,755	12-25-1990	Lebreton	
VP		US- 5,161,943	11-10-1992	Maier et al.	
VP		US- 5,190,440	03-02-1993	Maier et al.	

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,			
	110.	Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>3</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>		
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Examiner	fort 2 2 2 4 2 4	Date 02/02/2007
	/Vishal Patel/	1 0370272007
Signature	•	Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspio.gov">www.uspio.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Mind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

is attached.

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Substitute for form	1449A/PTO			Complete if Known		
INFORM				Application Number	10/560,800	
	ATION D			Filing Date	May 12, 2006	
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Sheet	2	of	3	Attorney Docket Number	0815-053671	

			U.S. PATENT I	OCUMENTS	
Examiner Cite Initials No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
		Number - Kind Code <sup>2 (if known)</sup>	umber - Kind Code <sup>2 (if known)</sup>		Passages or Relevant Figures Appear
VP		US- 5,632,598	05-27-1997	Maier	
VP		US- 5,967,746	10-19-1999	Hagi et al.	
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FOREIGN PATENT DOCUMENTS						
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Examiner		Date	
Signature	/Vishal Patel/	Considered 03/0	<b>2/2007</b>

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*****				Application Number	10/560,800	
	<b>EMATION</b>			Filing Date	May 12, 2006	
STATE	EMENT B	Y APPLI	CANT	First Named Inventor	Jiming Li et al.	
	///			Art Unit	3676	
(Use as many sheets as necessary)				Examiner Name	Not Yet Assigned	
Sheet	3	of	3	Attorney Docket Number	0815-053671	

	•	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
VP		E. A. SOTO et al., "Experimental Rotordynamic Coefficient Results for (a) a Labyrinth Seal With and Without Shunt Injection and (b) a Honeycomb Seal", Journal of Engineering for Gas Turbines and Power, January 1999, pp 153-158, Vol. 121	
VP		NASA Conference Publication 2409, "Instability in Rotating Machinery", June 10-14, 1985, National Aeronautics and Space Administration, pp. 1-13, Reproduced by U.S. Department of Commerce, National Technical Information Service, Springfield, VA	
VP		K. KWANKA, "Improving the Stability of Labyrinth Gas Seals", Journal of Engineering for Gas Turbines and Power, April 2001, pp. 383-387, Vol 123	
VP		D. W. CHILDS, ERIAN BASKHARONE, CHRISTOPHER RAMSEY, Test Results for Rotordynamic Coefficients of the SSME HPOTP Turbine Interstage Seal With Two Swirl Brakes, ASME J. of Tribology, Vol. 113, pp. 577-583 / 1991	
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Examiner	/Vishal Patel/	Date 03/02/2007
Signature	·	Considered 03/02/2007

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